

#### **SPECIFICATIONS**

#### **Enclosure:**

PR™ 1500

Frequency Response, 1 Meter on Axis, Swept Sine Averaged Across Operating Bandwidth in Anechoic Environment: 55 Hz-20 kHz +/-3 dB

Low Frequency Limit (-3 dB Point): 55 Hz

Usable Low Frequency Limit (-10 dB Point): 45 Hz

#### **Power Handling:**

250 watts continuous (44.7 volts RMS) 500 watts program

Sound Pressure Level, 1 Watt at 1 Meter, Swept Sine Input in Anechoic Environment: 100 dB

Maximum Sound Pressure Level: 123 dB

Radiation Angle Measured at -6 dB Point of Polar Response of Swept Sine Input:

250—500 Hz 170°+/-50° 500—10.000 Hz

Horizontal Plane:

Vertical Plane: 250—500 Hz

220°+/-20° **500—10,000 Hz** 

95° +/-20° 100° +/-25°

10.000—16.000 Hz 10.000—16.000 Hz

Directivity Factor Q, 500 Hz—16,000 Hz Median:

4.3 (+3.3, - 3.0)

**Directivity Index D<sub>i</sub>, 500-16,000 Hz Median:** 6.3 dB (+2.7 dB,-3.1 dB)

## **Transducer Complement:**

15" premium quality woofer, (1) compression driver coupled to a constant directivity horn and (1) constant directivity super tweeter

## Box Tuning Frequency (F box): 57 Hz

## Crossover Frequency:

1500 Hz and 8000 Hz

## Crossover Type:

Three-way passive

#### **Crossover Slope:**

12 dB/octave low pass 12 dB/octave band pass

18 dB/octave high pass

## Impedance (Nominal):

8 ohms

## Impedance (Minimal):

5.5 ohms

#### **Input Connections:**

Two 10-32 binding post terminals

#### **Enclosure Materials and Finish:**

%" plywood covered with oak grained vinyl

#### Mounting:

Flying via eight 1/2"-13 threaded inserts

## Dimensions:

21½" (54.6 cm) W × 29½" (74.9 cm) H × 15½" (39.4 cm) D

## Net Weight:

99 lbs. (35 kg)

## **DESCRIPTION**

The PR™ 1500 is a full-range, three-way enclosure designed specifically for permanent installation. The cabinet is constructed of ¾" plywood laminated with an oak grain veneer vinyl, reinforced with 10 gauge steel bracing. A black opaque grille is permanently attached to the baffle to provide component protection and cosmetic appeal. Eight mounting points are located along the gravity center line of the enclosure to symmetrically allow balanced suspension. The three-way system is comprised of a 15 inch low

loaded into a constant directivity horn supplying the mid and mid-high frequencies, and a constant directivity super tweeter to reproduce the high and ultra-high frequencies. The frequency spectrum is divided by a three-way passive crossover allowing the drivers to operate in optimum time alignment giving the system a smooth frequency response from 55 Hz out to 20,000 Hz. As requested by professional sound installers, the PR 1500 incorporates binding post terminals to facilitate secure lead connection.

#### **FREQUENCY RESPONSE**

The frequency response of the PR 1500 is measured in an anechoic environment at a distance of one meter while using a 2.82 volt logarithmically-swept sine input. This measurement is useful in determining the accuracy in which the enclosure reproduces the input signal. The combination of a premium grade woofer and the constant directivity mid and ultra-high frequency sections results in a flat response as shown in Figure 1.

## **DIRECTIVITY**

Beamwidth and directivity factors are derived from the -6 dB points from the polar plots (see Figure 5) which are measured in a whole space anechoic environment.

These are specifications which provide a reference to the coverage characteristics of the enclosure. These parameters provide insight for proper speaker placement and installation in the chosen environment. The components of the PR 1500 are blended to exhibit a desirable beamwidth and directivity factor (Figures 3 and 4) suitable for all permanent installations.

#### **POWER HANDLING**

There are many different approaches to power handling ratings, the most common being EIA standard RS-426A. The derived shape of this test spectrum was an attempt to simulate the spectral content of contemporary music. Although it does resemble contemporary music, EIA-RS-426A does not contain the same levels of very low frequency material found in live music situations. Very high levels

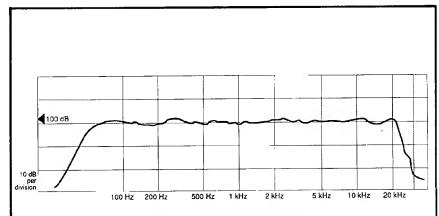


Figure 1. FREQUENCY RESPONSE

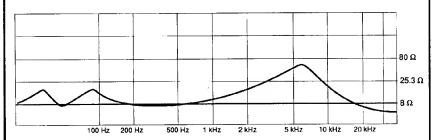


Figure 2. IMPEDANCE

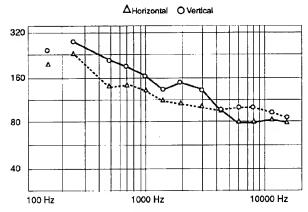


Figure 3. BEAMWIDTH VS. FREQUENCY

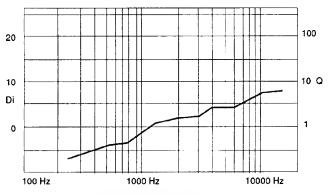
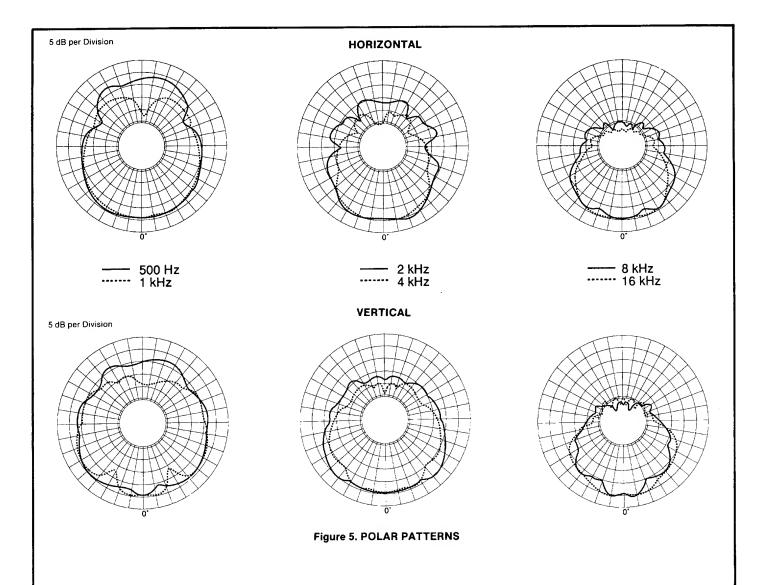
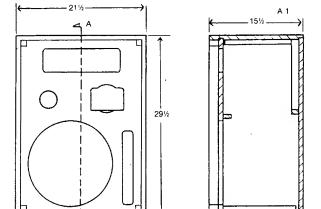


Figure 4. DIRECTIVITY





FRONT

SECTION A-A

DIMENSIONS

of low frequency material produce distortion and, ultimately, device failure. The presence of this low frequency material will therefore yield lower device ratings than produced by EIA standard RS-426A.

Although the Peavey ratings are lower than those produced by the EIA test spectrum, they are far more reliable and will have a direct correlation to real world situations.

#### MOUNTING

The PR™ 1500 is supplied with eight ½"-13 threaded inserts symmetrically placed on the gravity center of the enclosure which will allow both vertical and horizontal flying without overstressing the cabinet. The cabinet is reinforced with 10 gauge steel L-brackets which tie all six faces into a sturdy single unit. The grille frame is permanently attached to the baffle to alleviate any possibility of separation of the grille from the baffle.

# ARCHITECTURAL & ENGINEERING SPECIFICATIONS

The loudspeaker system shall have an operating bandwidth of 55 Hz to 20 kHz. The output level shall be 100 dB when measured at a distance of one meter with an input of one watt. The nominal impedance shall be 8 ohms. The continuous power handling shall be 250 watts, maximum program power of 500 watts, with a minimum amplifier headroom of 3 dB. The nominal radiation geometry shall be 90 degrees in the horizontal plane and 45 in the vertical plane. The outside dimensions shall be 211/2 inches wide by 291/2 inches high by 151/2 inches deep. The weight shall be 77 lbs. The loudspeaker system shall be a Peavey Architectural Acoustics Division model PR™ 1500.

#### **LIMITED WARRANTY**

Peavey Electronics Corporation warrants to the original purchaser of this new Architectural Acoustics' product that it is free from defects in material and workmanship. If within one (1) year from date of purchase a properly installed product proves to be defective and Peavey is notified, Peavey will repair or replace it at no charge. (Note: Batteries and patch cords not covered.) "Original purchaser" means the customer for whom the product is originally installed.

Damage resulting from improper installation, interconnection of a unit or system of another manufacturer, accident or unreasonable use, neglect or any other cause not arising from defects in material and workmanship is not covered by this warranty. The warranty is valid only as to products purchased and installed in the United States.

THIS LIMITED WARRANTY IS IN LIEU OF ANY AND ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE. UNDER NO CIRCUMSTANCES WILL PEAVEY BE LIABLE FOR ANY LOST PROFITS, LOST SAVINGS, INCIDENTAL DAMAGES OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PRODUCT, EVEN IF PEAVEY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. THIS LIMITED WARRANTY IS THE ONLY EXPRESS WARRANTY ON THIS PRODUCT. AND NO OTHER STATEMENT. REPRESENTATION, WARRANTY OR AGREEMENT BY ANY PERSON SHALL BE VALID OR BINDING UPON PEAVEY.

Peavey's liability to the original purchaser for damages for any cause whatsoever and regardless of the form of action, is limited to the actual damages up to the greater of Five Hundred Dollars (\$500) or an anount equal to the purchase price of the product that caused the damage or that is the subject of or is directly related to the cause of action. This limitation of liability will not apply to claims for personal injury or damage to real property or tangible personal property allegedly caused by Peavey's negligence. For information on service under this warranty, call a Peavey customer service representative at (601) 483-5376.

CAUTION: Before attempting to suspend this speaker consult a certified structural engineer. Speaker can fall from improper suspension, resulting in serious injury and property damage. Other enclosures may be suspended below one PR™ 1500. However, the combined weight of additional enclosures and all cables, clamps and other hardware must not exceed 123 pounds. The PR 1500 weighs 77 pounds and the maximum combined weight suspended from the uppermost mounting bracket assemblies must not exceed 200 pounds. Maximum enclosure angle 45°. Use only 1/2" forged shoulder machinery eye bolt MIL SPEC MS 51937-5. All associated rigging is the responsibility of others. This speaker system can permanently damage hearing! Use extreme care setting maximum loudness.

MAX POWER:

300W RMS (Program)

IMPEDANCE:

8 Ohms

**WEIGHT:** 

77 Lbs.

Features and specifications are subject to change without notice.

Peavey Architectural Acoustics Are Engineered and Manufactured in Our Facilities in the U.S.A.

